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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/821,693

04/10/2004

Howard Martin

1152

7590
06/08/2006
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EXAMINER

DONAHOE, CASEY D

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,693

Applicant(s)

MARTIN, HOWARD

Examiner

Casey Donahoe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7,8,10-12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,8,10-12 and 15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 7-9 and page 11, filed 3/13/2006, with respect to the rejection(s) of claim(s) 1 and 12 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a new combination of previously applied references.

Applicant's arguments filed on page 12, regarding the use of Johnsen et al. and Vice as modifying references against claims 8 and 10 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Furthermore, Applicant states that "the dimensions of the root canal file do not dictate the existence, shape or dimensions of the present channel." Examiner

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disagrees. The dimensions and shape of root canal files are perfectly reasonable factors for making obviousness conclusions about the shape and dimensions of the grooves to hold the files, when no other considerations are present. If Applicant has some special advantage, reason, or problem, which his dimensions draw from and would make his choice of values non-obvious, then he has not stated so.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, as amended and from which claim 10 depends, recites an open-faced semi-circular groove, yet claim 10 recites an internal cylindrical groove. These limitations contradict each other, thus it is unclear as to what the Applicant intends to claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al. (US 4,252,522) in view of Johnsen et al. (US 6,036,490).

Petty et al. disclose a multi-purpose dental tool, including an elongate handle, a mirror integrally attached to one end of the handle shaft, an open-faced groove opening distally into the second end of the shaft and extending therefrom, and measuring lines equally spaced along the shaft proximate the channel. Petty et al. fail to disclose a semi-circular cross-section adapted to conform to and receive a root canal file and secure it therein. Johnsen et al. disclose a measuring gauge for endodontic files including a semi-circular groove or channel (42) for receiving and securing the files. While, Johnsen et al. do not explicitly state the reasoning behind the shape of their groove, it is inherently advantageous. Since endodontic files possess circular cross sections, a mating groove, with a semicircular shape constitutes an obvious choice for a groove to securely hold the file. Furthermore, the groove provides an advantageous over the flat surface of Petty et al. in that it allows the user to securely position the file within the device, thus, preventing it from rolling away if the user removes his hand from the file. This provides the convenience of allowing the user to remove his hand, which may obscure his visual measurement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dental tool disclosed by Petty et al. with a semi-circular cross section, which will securely secure an endodontic file and allow the user to remove his hand.

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Regarding claim 3, the measuring lines are marked in millimeters with major intervals marked every 5 millimeters (column 2, line 11; Fig. 2).

Regarding claims 7 and 12, Petty et al. disclose a groove 40 mm in length while Johnsen et al. disclose a groove extending 30 mm in length. The length disclosed by Applicant clearly falls within an obvious range of lengths for measuring endodontic files. Because Applicant has not disclosed any special reason for the length measurement and because a 40 mm groove would perform equally as well as a 30 mm groove, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the groove disclosed by Petty et al. to 30 mm.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al. in view of Johnsen et al. as applied to claim 1 above, and further in view of Frider et al. (U.S. 6,932,601).

Petty et al. discloses the dental mirror described above, but fail to disclose the specific mirror dimensions. Angled mirrors are well known equivalents to straight mirrors in the art and 22-24 mm describes the diameter of many standard dental mirrors. Frider et al. disclose a circular mirror between 0.85" and 1.15" diameter (22-29 mm) (column 5, lines 51-53) and between 135 and 155 degrees (or 45 and 65 degrees) (column 4, line 13), which include the claimed dimensions of 22-24 mm and 45 degrees. Such dimensions are used by Frider et al. to provide a tool useful to the mouth of a patient. It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute an angled mirror at approximately 45 degrees for the straight

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mirror disclosed by Chadwick et al. and to construct the mirror between 22 and 24 mm, because such dimensions are standard in the art and provide a tool useful to the mouth of a patient.

Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al. in view of Johnsen et al. as applied to claim 1 above, and further in view of Vice (U.S. 4,028,810).

Petty et al. disclose the combination dental mirror and measuring gauge described earlier, and Johnsen et al. disclose a semi-circular groove, but both fail to explicitly disclose the dimensions of the groove. Vice discloses another system for measuring root canal files, in which the diameter of the standard measured file is disclosed to fall between 0.75 and 1.0 mm. Because all of devices are used to measure the same type of files it would be obvious to dimension the groove/channel to receive files between 0.75 and 1.0 mm. It would have been obvious to one of ordinary skill in the art at the time of the invention to construct the groove disclosed by Johnsen et al. with a diameter of approximately 1.0 mm to accommodate for standard root canal files. Furthermore, because Applicant has not stated any particular advantage with his dimensions, they fall within a range of obvious values.

Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al. in view of Johnsen et al., Petty et al., and Vice as applied to claim 8 above, and further in view of Chadwick et al. (WO 01/41668 A1).

Petty et al. disclose the dental device described above and Petty et al. discloses a 30 mm channel while Vice discloses typical dimensions of an endodontic file. None of the above, however, disclose a cylindrical channel. Chadwick et al. disclose a dual mirror and measurement device, in which the channel is cylindrical (Fig. 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the handle of the device disclosed by Petty et al. with a cylindrical channel with the dimensions discussed above. This channel would allow more freedom of movement by the user as an endodontic file would be more positively secured by a cylindrical channel than a flat surface or semi-circular groove, and less likely to fall out even if moved by the dentist.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petty et al. in view of Johnsen et al. as applied to claim 1 above, and further in view of Berk et al. (U.S. 6,595,775).

Petty et al. disclose the combination dental mirror and measuring gauge described earlier, but fail to disclose the materials of construction. It is well known in the art to form dental mirrors from stainless steel or plastic, as demonstrated by Berk et al. (column 4, lines 38-40), because they are resistant to corrosion and can be sterilized. It would have been obvious to one of ordinary skill at the time of the invention to form the device disclosed by Petty et al. of either plastic or stainless steel, as taught by Berk et al. in order to provide a tool that can be easily sterilized.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Casey Donahoe whose telephone number is (571) 272-2812. The examiner can normally be reached on Monday - Thursday (7:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272 -4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ralph A. Lewis
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Casey Donahoe
Examiner
Art Unit 3732


5/30/06